of ground source of water/alcohol is well known in the art. Latin discloses that quick disconnect couplings are well known in the art.

It is respectfully submitted that Moore does not disclose or suggest "storing data in which the helicopter can start safely" as alleged by the Examiner. Moore refers over and over to problems during the operation of a helicopter such as when a helicopter pilot is required to lift a heavy load from a location where the quarters are relatively confined or cramped. (see column 5, lines 2-12) Clearly Moore does not address the problem of "hot starts" or an 810°C to 927°C maximum 10 second transition limitation discussed on page 1 of applicant's specification. In other words, Moore addressed a different problem and has not disclosed or suggest storing data at which the helicopter can start safely.

In addition to the above, there is one major difference between Applicant's claims 11-13 and Moore that has apparently been overlooked by the Examiner. The difference relates to Applicant's use of a temperature profile as opposite to a single preselected temperature.

To be more specific, claims 11-13 call for:

> data storage means and means for inputting a safe temperature profile for starting the helicopter turbine engine; (Emphasis Added.)

Claims 11-13 also call for:

> comparison means for producing a signal when the actual engine temperature falls outside of the safe engine temperature profile during start-up of the engine; (Emphasis Added.)

For comparison, Moore teaches at column 3, lines 1-10, that an audio alarm is activated with warning signals when the temperature of the turbine engine as sensed exceeds the

predetermined levels, when the torque output...exceeds predetermined limits...when the speed of the engine exceeds predetermined speed limits.... At column 4, lines 7-10 the patent states:

> ...reduces field flow thereby maintaining the helicopter operation below the limits mentioned hereinabove relative to temperature, torque and speed.

Further in column 5, lines 10-13 the patent teaches:

> ...the additional problem that the helicopter pilots attention must be directed to avoid obstacles and the like. Accordingly, there is considerable potential for overstressing the engine because the pilot cannot keep his eye on the cockpit instrumentation where a high temperature or other factors would be indicated.

It is respectfully contended that Moore does not disclose or suggest "inputting a safe temperature profile for starting the helicopter turbine engine" or " producing a signal when the actual engine temperature falls outside of the safe engine temperature profile during the start-up of the engine.

From the above, it is clear that Moore is not concerned with avoiding "hot starts" and does not suggest the use of a safe temperature profile for starting a helicopter turbine engine as called for in claims 11-13.

As taught on page 5 of Applicant's specification inputting a safe temperature profile during start-up into the computer allows remedial action to be implemented earlier i.e., as soon as the actual temperature versus a safe temperature profile (a time-temperature curve) exceeds a comparable time temperature curve in the profile as opposed to waiting for the temperature to reach a critical value. Applicant's concept is not disclosed or suggested by Moore or any other

cited reference.

Further, on page 3 of the aforementioned Office Action, the Examiner stated:

> In response to applicant's arguments that Moore does not teach a means for inputting a safe temperature profile, please note that this is part of the computer system to control the helicopter. In this day and age, computers are programmed by keyboards and mice. Thus keyboards and mice are used to input a safe temperature profile. Plus, why would one skilled in the art want to input unsafe temperature profile that can damage the helicopter?

It is true that computers are programmed by keyboards and mice which are well known. However, the concept of using a safe temperature profile to avoid "hot starts" is not taught by any of the references. Clearly, there is no disclosure and no suggestion in Moore or any of the other references to input a safe temperature profile into a system and to abort a start-up when the actual time and temperature exceeds the time and temperature in the profile for a safe start-up.

In response to the Examiner's question, as to "...why would one skilled in the art want to input an unsafe temperature profile that can damage the helicopter," applicant does not do so. What applicant does do is to enter a safe temperature profile, and as soon as the actual temperature at any time during a start up of the engine falls outside of the profile, take appropriate action to avoid a "hot start". As for example, injecting water and/or alcohol into the helicopter engine. This concept is not disclosed or suggested by Moore or any of the other references.

Finally, it is respectfully submitted that Grondin *et al.*, Jensen, or Matthews *et al.* do not show the use of a ground source of water/alcohol for an aircraft. What they do disclose is a filter

pump system with a screen, a system for periodic fluid maintenance of apparatus and a coolant recycling system. Accordingly, it is Applicant's contention that these references have no bearing on the use in a helicopter and that such references do not disclose or suggest Applicant's unique combination of elements. Clearly, there is no suggestion in any of the references to suggest the concept wherein a cooling liquid is available to avoid a hot start and, if used, is replenished before take-off so that an adequate supply of cooling liquid is available for a subsequent overstressed condition.

In view of the above, it is Applicant's contention that claims 11, 12 and 13 should be allowed.

Prompt favorable action is requested.

Respectfully submitted,

June 30, 2005
Date

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